

Burroughs Corporation



TENTATIVE

ELECTRONIC COMPONENTS DIVISION

Plainfield, New Jersey

NIXIE^(R) INDICATOR TUBE WITH DECIMAL POINT

B-59956

The B-59956 NIXIE tube is an ultra long life, rectangular, cold cathode numerical readout tube (0-9) with an internal decimal point and common anode.

ELECTRICAL SPECIFICATIONS

ABSOLUTE RATINGS

Ionization Voltage	170 Vdc max.
Supply Voltage	170 Vdc min. (Note 1)
Cathode Current	3.5 ma max.
Decimal Point Current	0.5 ma max. (Note 2)

TYPICAL OPERATING CONDITIONS (Figure 1)

Supply Voltage (E _{bb})	170 Vdc
Series Resistor (R)	8.2 K ohms
Cathode Current (I _k)	3.0 ma max.
	2.0 ma min.
Decimal Point Current	0.3 ma nom. (Note 2)

MECHANICAL CHARACTERISTICS

Outline Drawing	Figure 2
Pin Connections & Bottom View	Figure 3
Pin Straightener (LS-210)	Figure 4
Sockets (SK169 & SK144)	Figures 5 & 6
Ambient Temperature Range	-20°C to +55°C

NOTES

- The minimum supply voltage should be 170 volts. However, the use of the highest available voltage with the appropriate series resistor is recommended to maintain cathode current within the specified limits. A supply voltage of 200 volts or more is recommended to assure proper operation at the temperature extremes. R at 200 V is 20 K ohm; R at 250 V is 39 K ohm; R at 300 V is 62 K ohm.
- The decimal point can be used in two modes of operation:
 - Where a numeral will always be "on"; in this condition the anode resistor as specified in Note 1 and the circuit in Figure 1a is valid.
 - Where a numeral may or may not be "on" when the decimal point is "on"; in this condition individual tube cathode resistors are necessary in place of the single anode resistor. See Figure 1b.

SUPPLY VOLTAGE (Vdc)	170	200	250	300
Numeral Resistor (K Ω)	10	22	47	68
Decimal Resistor (K Ω)	68	180	330	510

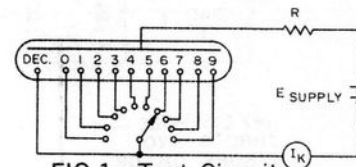


FIG.1a Test Circuit
(Notes 1 and 2a)

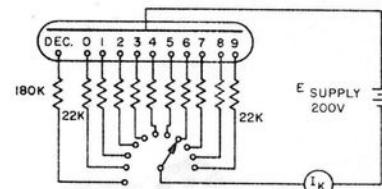
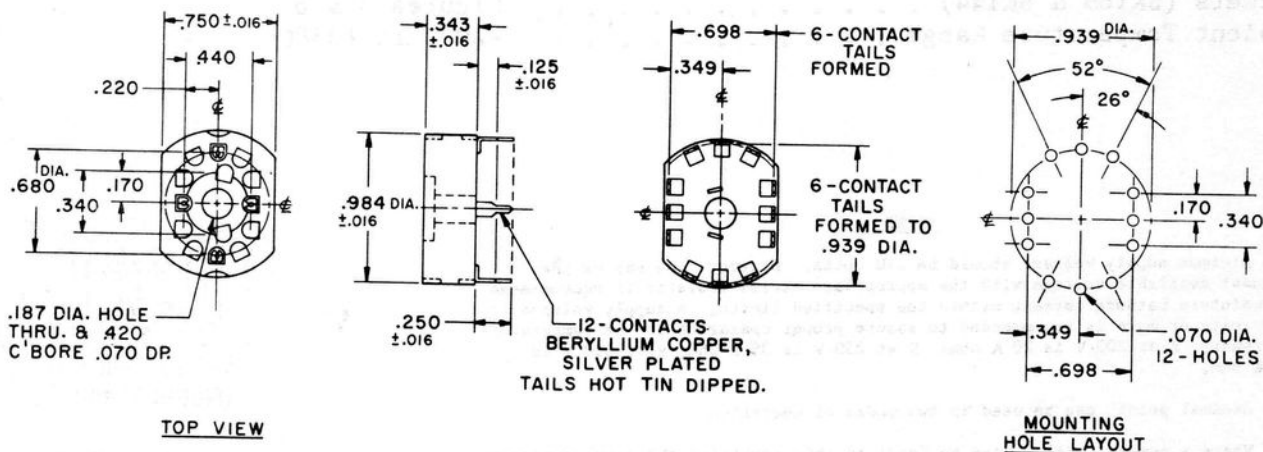
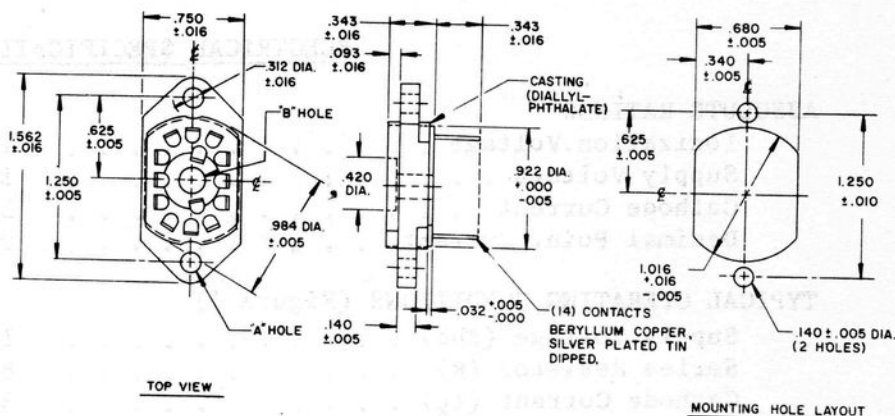
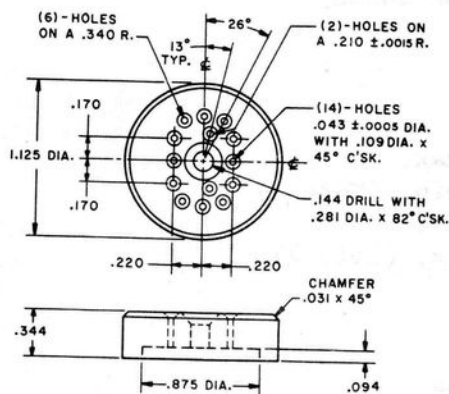
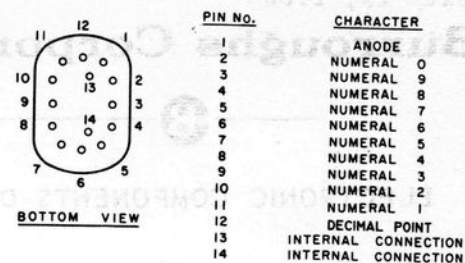
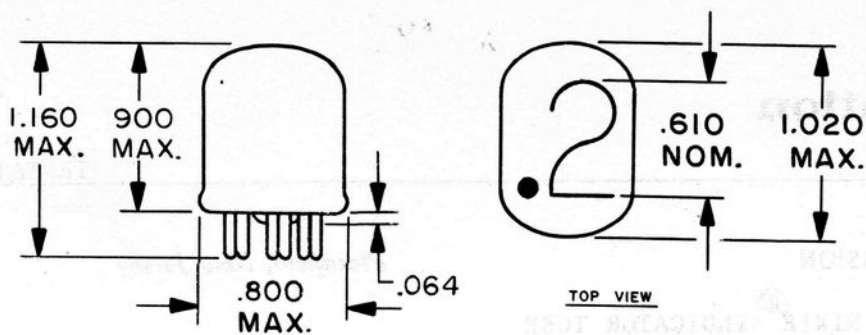


FIG.1b Test Circuit
(Note 2b)



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